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			2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/12/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/072,055

Applicant(s)

BHALLA ET AL.

Examiner

Roberta A. Shand

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-12, 15-20, 23, 25, 33-36, 39, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour (U.S. 2002/0114293 A1) in view of Abrol (U.S. 2003/0099219 A1).
3. Regarding claim 1, Madour teaches (abstract and fig. 2) a method of optimizing point-to-point sessions, comprising: receiving a registration request from a mobile node (paragraph 14), the mobile node communicating with current packet controller function serviced packet data serving node (paragraph 13); and determining whether the mobile node is serviced by a mobile Internet Protocol (paragraphs 6 and 9).
4. Madour does not explicitly teach determining whether registration request comprises previous access network identifier identifying a previous packet controller function; determining whether the mobile node communicated with previous packet controller function serviced by the packet data serving node; and deciding whether negotiate a point-to-point session for mobile node response to the determinations. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller

Art Unit: 2616

function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

5. Abrol teaches (fig. 4) determining whether registration request comprises previous access network identifier identifying a previous packet controller function (paragraph 10); determining whether the mobile node communicated with previous packet controller function serviced by the packet data serving node (405, 415); and deciding whether negotiate a point-to-point session for mobile node response to the determinations (paragraphs 39-46). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

6. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

7. Regarding claims 2, 10 and 17, Madour teaches (paragraph 21) the registration request comprises a request for service at the packet data serving node.

Art Unit: 2616

8. Regarding claims 3, 11, 18 and 34, Abrol teaches (paragraph 11 and fig. 4) negotiating the point-to-point session if the mobile node did not communicate with previous packet controller function serviced the packet data serving node; and updating the point-to-point session if the mobile node communicated with a previous packet controller function serviced by the packet data serving node.
9. Regarding claims 4, 12, 19 and 35, Abrol teaches (fig. 4) determining whether there is a session context for the mobile node; negotiating point-to-point (440) session if there is no session context; and updating point-to-point session if there is session context.
10. Regarding claims 5, 20 and 36, Abrol teaches (fig. 4) determining registration request comprises the previous access network identifier; identifying the previous packet controller function from the previous access network identifier (paragraph 20); determining whether the previous packet controller function is serviced by the packet data serving node (415); negotiating the point-to-point session if the previous packet controller function not serviced by the packet data serving node (paragraph 11); and updating the point-to-point session the previous packet controller function is serviced by the packet data serving node (440).
11. Regarding claim 8, Madour teaches (abstract and fig. 2) a method of optimizing point-to-point sessions, comprising: receiving a registration request from a mobile node (paragraph 14), the mobile node communicating with current packet controller function serviced packet data

Art Unit: 2616

serving node (paragraph 13); and determining whether the mobile node is serviced by a mobile Internet Protocol (paragraphs 6 and 9).

12. Madour does not explicitly teach determining whether registration request comprises previous access network identifier identifying a previous packet controller function; determining whether the mobile node communicated with previous packet controller function serviced by the packet data serving node; and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

13. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

14. Abrol teaches (fig. 4) determining whether registration request comprises previous access network identifier identifying a previous packet controller function (paragraph 10); determining whether the mobile node communicated with previous packet controller function serviced by the packet data serving node (405, 415); and deciding whether negotiate a point-to-point session for mobile node response to the determinations (paragraphs 39-46). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

15. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function,

Art Unit: 2616

whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

16. As for, determining that the mobile node is serviced by a single IP; determining whether a first IP address associated with the mobile node is substantially similar to a second IP address associated with the mobile node, the first IP address associated with a message received from the mobile node, the second IP address stored at the PDSN; negotiating the PPP session, if the first IP address is not substantially similar to the second IP address; and updating the PPP session if the first IP address is similar to the second IP address, It is inherent in Abrol's system (paragraph 19) that when the database (fig. 3) is consulted (fig. 4, 410) the IP address is checked. Abrol teaches that the mobile station consults a database (paragraph 20) to determine if the PCF and PDSN have changed based on the IP address.

17. Regarding claim 9, Madour teaches (abstract and fig. 2) a method of optimizing point-to-point sessions comprising: receiving a registration request from a mobile node (paragraph 14), the mobile node communicating with current packet controller function serviced by a packet data serving node (paragraph 13); determining whether the mobile node serviced by a mobile Internet Protocol (paragraphs 6 and 9).

Art Unit: 2616

18. Madour does not explicitly teach determining whether the mobile node communicated with a previous packet controller function serviced the packet data serving node; and deciding whether to negotiate a point-to-point session for the mobile node response to the determinations.

19. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

20. Abrol teaches (fig. 4) determining whether the mobile node communicated with a previous packet controller function serviced the packet data serving node (405, 415); and deciding whether to negotiate a point-to-point session for the mobile node response to the determinations (paragraphs 39-46). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

21. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

22. Regarding claim 15, Madour teaches (abstract and fig. 2) a method of optimizing point-to-point sessions comprising: receiving a registration request from a mobile node (paragraph 14), the mobile node communicating with current packet controller function serviced by a packet data serving node (paragraph 13); determining whether the mobile node serviced by a mobile Internet Protocol (paragraphs 6 and 9).

23. Madour does not explicitly teach determining whether the mobile node communicated with a previous packet controller function serviced the packet data serving node; and deciding whether to negotiate a point-to-point session for the mobile node response to the determinations.

24. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

25. Abrol teaches (fig. 4) determining whether the mobile node communicated with a previous packet controller function serviced the packet data serving node (405, 415); and deciding whether to negotiate a point-to-point session for the mobile node response to the determinations (paragraphs 39-46). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

26. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function,

Art Unit: 2616

whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

27. As for, determining that the mobile node is serviced by a single IP; determining whether a first IP address associated with the mobile node is substantially similar to a second IP address associated with the mobile node, the first IP address associated with a message received from the mobile node, the second IP address stored at the PDSN; negotiating the PPP session, if the first IP address is not substantially similar to the second IP address; and updating the PPP session if the first IP address is similar to the second IP address, It is inherent in Abrol's system (paragraph 19) that when the database (fig. 3) is consulted (fig. 4, 410) the IP address is checked. Abrol teaches that the mobile station consults a database (paragraph 20) to determine if the PCF and PDSN have changed based on the IP address.

28. Regarding claim 16, Madour teaches (abstract and fig. 2) a system for optimizing point-to-point sessions comprising: at least one packet data serving node operable to: receive registration request from a mobile node (paragraph 14), the mobile node communicating with current packet controller function serviced by the packet data serving node (paragraph 13); and determine whether the mobile node is serviced by a mobile Internet Protocol (paragraphs 6 and 9);

Art Unit: 2616

29. Madour does not explicitly teach determine whether the registration request comprises a previous access network identifier identifying a previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node; and decide whether to negotiate point-to-point session for the mobile node response to determinations; and plurality packet controller functions communicating with the at least one packet data serving node.

30. Abrol teaches (fig. 4) determine whether the registration request comprises a previous access network identifier identifying a previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node (405, 415); and decide whether to negotiate point-to-point session for the mobile node response to determinations (paragraphs 39-46); and plurality packet controller functions communicating with the at least one packet data serving node (paragraph 27). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

31. Regarding claim 23, Madour teaches (abstract and fig. 2) a system for optimizing point-to-point sessions comprising: at least one packet data serving node operable to: receive registration request from a mobile node (paragraph 14), the mobile node communicating with current packet controller function serviced by the packet data serving node (paragraph 13); and determine whether the mobile node is serviced by a mobile Internet Protocol (paragraphs 6 and 9);

Art Unit: 2616

32. Madour does not explicitly teach determine whether the registration request comprises a previous access network identifier identifying a previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node; and decide whether to negotiate point-to-point session for the mobile node response to determinations; and plurality packet controller functions communicating with the at least one packet data serving node.

33. Abrol teaches (fig. 4) determine whether the registration request comprises a previous access network identifier identifying a previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node (405, 415); and decide whether to negotiate point-to-point session for the mobile node response to determinations (paragraphs 39-46); and plurality packet controller functions communicating with the at least one packet data serving node (paragraph 27). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

34. As for, determining that the mobile node is serviced by a single IP; determining whether a first IP address associated with the mobile node is substantially similar to a second IP address associated with the mobile node, the first IP address associated with a message received from the mobile node, the second IP address stored at the PDSN; negotiating the PPP session, if the first IP address is not substantially similar to the second IP address; and updating the PPP session if the first IP address is similar to the second IP address, It is inherent in Abrol's system (paragraph 19) that when the database (fig. 3) is consulted (fig. 4, 410) the IP address is checked.

Art Unit: 2616

Abrol teaches that the mobile station consults a database (paragraph 20) to determine if the PCF and PDSN have changed based on the IP address.

35. Regarding claim 25, Madour teaches (fig. 2) the least one packet data serving node is further operable to establish a tunnel connection to communicate between the at least one packet controller function and the at least one packet data serving node.

36. Regarding claim 33, Madour teaches (abstract and fig. 2) Logic for optimization of point-to-point sessions, the logic embodied a computer-readable medium and operable receive a registration request from a mobile node (paragraph 14); and determine whether the mobile node is serviced by mobile Internet Protocol (paragraphs 6 and 9).

37. Madour does not teach determining whether the registration request comprises previous access network identifier identifying previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node; and decide whether to negotiate point-to-point session for the mobile node in response to the determinations.

38. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

Art Unit: 2616

39. Abrol teaches (fig. 4) determining whether the registration request comprises previous access network identifier identifying previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node (405, 415); and decide whether to negotiate point-to-point session for the mobile node in response to the determinations (paragraphs 39-46); and plurality packet controller functions communicating with the at least one packet data serving node (paragraph 27). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

40. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

41. Regarding claim 39, Madour teaches (abstract and fig. 2) Logic for optimization of point-to-point sessions, the logic embodied a computer-readable medium and operable receive a registration request from a mobile node (paragraph 14); and determine whether the mobile node is serviced by mobile Internet Protocol (paragraphs 6 and 9).

Art Unit: 2616

42. Madour does not teach determining whether the registration request comprises previous access network identifier identifying previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node; and decide whether to negotiate point-to-point session for the mobile node in response to the determinations.

43. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

44. Abrol teaches (fig. 4) determining whether the registration request comprises previous access network identifier identifying previous packet controller function; determine whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node (405, 415); and decide whether to negotiate point-to-point session for the mobile node in response to the determinations (paragraphs 39-46); and plurality packet controller functions communicating with the at least one packet data serving node (paragraph 27). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

45. As for, determining that the mobile node is serviced by a single IP; determining whether a first IP address associated with the mobile node is substantially similar to a second IP address associated with the mobile node, the first IP address associated with a message received from the

Art Unit: 2616

mobile node, the second IP address stored at the PDSN; negotiating the PPP session, if the first IP address is not substantially similar to the second IP address; and updating the PPP session if the first IP address is similar to the second IP address. It is inherent in Abrol's system (paragraph 19) that when the database (fig. 3) is consulted (fig. 4, 410) the IP address is checked. Abrol teaches that the mobile station consults a database (paragraph 20) to determine if the PCF and PDSN have changed based on the IP address.

46. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

47. Regarding claim 40, Madour teaches (abstract and fig. 2) a system optimizing point-to-point sessions comprising: means for receiving a registration request from mobile node (paragraph 14), the mobile node communicating with a current packet controller function serviced by packet data serving node (paragraph 13); and means for determining whether the mobile node serviced by a mobile Internet Protocol (paragraph 6 and 9)

48. Madour does not teach means for determining whether the registration request comprises previous access network identifier identifying a previous packet controller function;; a means for

Art Unit: 2616

determining whether the mobile node communicated with previous packet controller function serviced by the packet data serving node; and means for deciding whether to negotiate a point-to-point session for the mobile node in response the determinations.

49. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

50. Abrol teaches (fig. 4) means for determining whether the registration request comprises previous access network identifier identifying a previous packet controller function; a means for determining whether the mobile node communicated with previous packet controller function serviced by the packet data serving node (405, 415); and means for deciding whether to negotiate a point- to-point session for the mobile node in response the determinations (paragraphs 39-46); and plurality packet controller functions communicating with the at least one packet data serving node (paragraph 27). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

51. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as

Art Unit: 2616

the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

52. Regarding claim 41, Madour teaches (abstract and fig. 2) receiving registration request from a mobile node (paragraph 14), the registration request comprising a request for service; and determining whether the mobile node serviced by mobile Internet Protocol (paragraphs 6 and 9);

53. Madour does not teach determining whether the registration request comprises previous access network identifier identifying a previous packet controller function; determining whether the mobile node communicated with a previous packet controller function serviced by the packet data serving node; and deciding whether to negotiate a point-to-point session for the mobile node in response the determinations by: negotiating the point-to-point session if the mobile node did not communicate through the previous packet controller function serviced by packet data serving node; and updating point-to-point session mobile node did communicate through the previous packet controller function serviced by the packet data serving node.

54. Madour also does not teach the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations.

55. Abrol teaches (fig. 4) determining whether the registration request comprises previous access network identifier identifying a previous packet controller function; determining whether the mobile node communicated with a previous packet controller function serviced by the packet

Art Unit: 2616

data serving node (405, 415); and deciding whether to negotiate a point-to-point session for the mobile node in response the determinations by: negotiating the point-to-point session if the mobile node did not communicate through the previous packet controller function serviced by packet data serving node (paragraphs 39-46); and updating point-to-point session mobile node did communicate through the previous packet controller function serviced by the packet data serving node (440). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

56. Abrol also teaches (paragraph 10) the PDSN determining whether registration request comprises previous access network identifier identifying a previous packet controller function, whether the mobile node communicated with previous packet controller function serviced by the packet data serving node, and deciding whether negotiate a point-to-point session for mobile node response to the determinations (Abrol teaches determining if the new PCF is the same as the previous PCF and if not the PPP is resynchronized and IP re-registered). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system so that the PDSN can control the PPP connection for Mobile IP registration.

57. Claims 6, 7, 13, 14, 21, 22, 26-32, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour in view of Abrol and further in view of Bertrand (U.S. 6876640 B1).

Art Unit: 2616

58. Regarding claims 6, 13, 21, 31, 32 and 37, Madour and Abrol do not explicitly teach generating table comprising an entry associated with the mobile node, the entry comprising a mobile node identifier, previous access network identifier, current access network identifier.

59. Bertrand teaches (col. 6, lines 43-64) generating table comprising an entry associated with the mobile node, the entry comprising a mobile node identifier, previous access network identifier, current access network identifier. It would have been obvious to one of ordinary skill in the art to adapt this to Madour and Abrol's system to keep track of the mobile station.

60. Regarding claim 7, 14, 22 and 38, Bertrand teaches (col. 8, 11-34) updating tunnel connection operable to communicate plurality of data packets between the current packet controller function and the packet data serving node by updating the entry associated with the mobile node.

61. Regarding claim 26, Madour teaches (abstract and fig. 2) a processor coupled to the memory and operable to: receive registration request from the mobile node (paragraph 14); and determine whether the mobile node is serviced by a mobile Internet Protocol (paragraphs 6 and 9);

62. Madour does not teach determine whether the registration request comprises previous access network identifier identifying a previous packet controller function; determine whether the mobile node communicated with previous packet controller function serviced by the packet data serving node; and decide whether negotiate a point-to-point session the mobile node response the determinations.

Art Unit: 2616

63. Abrol teaches (fig. 4) determine whether the registration request comprises previous access network identifier identifying a previous packet controller function; determine whether the mobile node communicated with previous packet controller function serviced by the packet data serving node (405, 415); and decide whether negotiate a point-to-point session the mobile node response the determinations (paragraphs 39-46). It would have been obvious to one of ordinary skill in the art to adapt this to Madour's system to avoid resynchronizing a PPP, bring up the traffic channel and re-registering mobile IP unless new PCF is different from the previous PCF (paragraph 10).

64. Madour and Abrol do not teach a memory operable to store table, table comprising an entry corresponding to mobile node, the entry comprising: a mobile station identifier field operable to store a mobile station identifier; and previous access network identifier field operable to store a previous access network identifier.

65. Bertrand teaches (col. 6, line7s 43-64) a memory operable to store table, table comprising an entry corresponding to mobile node, the entry comprising: a mobile station identifier field operable to store a mobile station identifier; and previous access network identifier field operable to store a previous access network identifier. It would have been obvious to one of ordinary skill in the art to adapt this to Madour and Abrol's system to keep track of the mobile station.

66. Regarding claim 27, Madour teaches (paragraph 21) the registration request comprises a request for service at the packet data serving node.

Art Unit: 2616

67. Regarding claim 28, Abrol teaches (fig. 4) deciding whether to negotiate the point-to-point session for the mobile node comprises: negotiating the point-to-point session if the mobile node did not communicate with previous packet controller function serviced the packet data serving node; and updating the point-to-point session if the mobile node communicated with a previous packet controller function serviced by the packet data serving node (paragraphs 39-46).

68. Regarding claim 29, Abrol teaches (paragraphs 39-46) determining whether there is a session context for the mobile node; negotiating point-to-point session there no session context; and updating point-to-point session if there is session context.

69. Regarding claim 30, Abrol teaches (fig. 4) determining registration request comprises the previous access network identifier; identifying the previous packet controller function from the previous access network identifier (405); determining whether the previous packet controller function is serviced by the packet data serving node (415); negotiating the point-to-point session if the previous packet controller function not serviced by the packet data serving node; and updating the point-to-point session the previous packet controller function is serviced by the packet data serving node (paragraphs 39-46).

70. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madour in view of Abrol and further in view of Madour (U.S. 6834050 B1).

Art Unit: 2616

71. Regarding claim 24, Madour and Abrol teach at least one of the packet controller functions is operable to: communicate with the at least one packet data serving node (fig. 4).

72. Madour and Abrol do not explicitly teach storing an access network identifier identifying the at least one packet controller function.

73. Madour ('050) teaches (col. 3, lines 15-27) at least one of the packet controller functions is operable to: communicate with the at least one packet data serving node; and store an access network identifier identifying the at least one packet controller function. It would have been obvious to one of ordinary skill in the art to adapt this to Madour and Abrol's system to maintain order within the system.

Response to Arguments

74. Applicant's arguments with respect to claims 1-7, 9-14, 16-22, 24-31, 33-38, 39 and 41 have been considered but are moot in view of the new ground(s) of rejection.

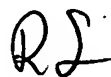
Conclusion

75. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

Art Unit: 2616

76. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

77. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roberta A Shand
Examiner
Art Unit 2616



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